

Media Evolution, “Double-edged Sword” Technology and Active Spectatorship:

investigating “Desktop Film” from media ecology perspective

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Abstract

Desktop film or computer screen film is a film subgenre with all events and actions taking place on a screen of a computer and using the protagonist's first-person perspective, exemplified by *The Den* (2013), *Open Windows* (2014), *Unfriended* (2014), *Unfriended: Dark Web* (2018), *Profile* (2018) and *Searching* (2018). This paper mainly focuses on the desktop films with the theoretical framework of “Media Ecology”, aiming to investigate how the desktop film evolves and interacts with new media, digital technology, while influencing communication and spectatorship. Firstly, this paper discusses the evolution of cinema, which evolves through the interaction, co-existence and convergence with other media, as well as corresponds to the anthropotropic trend. Secondly, this paper investigates the digital media and technology in desktop films. “Desktop films” create cyberspaces and reproduce people's virtual lives, revealing the influences of media technology, which is considered as a double-edged sword. Thirdly, this paper analyzes how desktop film exerts impacts on cinematic communication, while reshaping the spectatorship and audience's viewing mechanism. “Desktop films” are suitable to be watched on computer, thus making audiences become active and have more autonomy.

Keywords

Desktop Film; Media Ecology; Evolution; Technology; Spectatorship.

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Evolução da Mídia, Tecnologia “Espada de Dois Gumes” e Espectatorialidade Ativa:

investigando o “Filme de Nootbook” pela perspectiva da ecologia da mídia

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Resumo

Desktop film ou *computer screen film* são subgêneros do cinema, nos quais todas as ações e eventos se passam na tela de um computador, sob a perspectiva em primeira pessoa do protagonista, como em *The Den* (2013), *Open Windows* (2014), *Unfined* (2014), *Unfined: Dark Web* (2018), *Profile* (2018) e *Searching* (2018). Esse trabalho, centrado nos *desktop films* sob o arcabouço teórico do “*Media Ecology*”, pretende investigar como o gênero evolui e interage com os novos meios e a tecnologia digital, e ao mesmo tempo influencia a comunicação e o público. Primeiramente, é discutida a evolução do cinema rumo à interação, coexistência e convergência com outros meios, em sua correspondência à tendência antropotrópica. Em seguida, investiga-se os meios digitais e a tecnologia nos *desktop films*. Os “*Desktop Films*” criam ciberespaços, reproduzem as vidas virtuais das pessoas e revelam a influência da tecnologia da mídia, o que é considerado uma “faca de dois gumes”. Por fim, o trabalho analisa como o *desktop film* impacta a comunicação cinematográfica, ao reconfigurar o mecanismo de percepção do público. Consequentemente, ao se ajustarem à exibição na tela do computador, os “*Desktop films*” já fazem com que o público se torne ativo e mais autônomo.

Palavras-chave

Filmes de Notebook; Ecologia da mídia; Evolução; Tecnologia, Espectatorialidade.

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With the further development of digital technology and media convergence, cinema industry has entered an era of “Post-Cinema” (DENSON; LEYDA, 2016). There are an increasing number of new forms of cinemas such as interactive film, VR film, databases film, desktop film, etc., not only changing the way in which films are produced and distributed, but also influencing the spectatorship and recognition of the film. According to Timur Bekmambetov’s (2015) definition, desktop film, or termed as “screen movie”, is a new format of cinema in which all the events take place on a protagonist’s computer screen with the protagonist’s first-person perspective; all the actions take place in real time and are organized through in-frame montage without visible editing and transition; all the sounds originate from the computer. This sort of screen narrative pattern began with short film and advertisement around the year 2010, exemplified by *Parisian Love* (2010) produced by Google. The long-length feature films *The Den* (2013) and *Open Windows* (2014) use computer interfaces to narrative, while, actually, *Unfriended* (2014) is regarded as the first “desktop film” with plots completely taking place on the protagonist Blair’s computer screen and unfolding as she manipulates it. Afterwards, more “desktop films” are produced, exemplified by *Unfriended: Dark Web* (2018), *Profile* (2018) and *Searching* (2018). Generally, desktop film is categorized into suspense or horror genre, creating a sense of mockumentary due to its subjective perspective and screen narrative.

The term of Media Ecology was pioneered by Marshall McLuhan. Inspired by McLuhan, Neil Postman formally explained it in public in 1968 and subsequently defined it as “the study of media as environments” (1970, p.16). As Postman (2000) demonstrates, human beings live in both natural environment and media environment, and the latter “consists of language, numbers, images, holograms, and all of the other symbols, techniques, and machinery that make us what we are”; “a medium is a technology within which a culture grows...it gives form to a culture’s politics, social organization, and habitual ways of thinking”. Media Ecology mainly focuses on the media environment (including the structure, content and impact on people) and the ways in which media and human beings interact, and it particularly investigates “how media of communication affect human perception, understanding, feeling, and value; and who our interaction with media facilitates or impedes our chances of survival” (POSTMAN, 1970, p. 161). This paper mainly focuses on the desktop film with the theoretical framework of “Media Ecology”, aiming to investigate how the desktop film evolves and interacts with new media, digital technology and human beings, while exerting influences on filmic communication and spectatorship.

According to the evolution concept in Media Ecology, the development of media depends on the level of technology. Shao Peiren, who is a Chinese scholar of “Media Ecology”, investigates the evolution of media and indicates that human communication has experienced five revolutions: language communication, writing communication, printing communication, electronic communication and interactive communication; “it seems that the evolution of media does not follow the rules of survival of the fittest and natural selection, but conforms to the principle of interaction, mutual assistance and mutual development” (SHAO, 1996, p.8).

As one of the mass media, cinema has been evolving since its birth, which is not isolated, but interacts with other media to form an ecosystem of co-existence and convergence. In different eras, cinemas continuously integrate the other media and increasingly display new characteristics. Meanwhile, the definition and recognition of film is changing. The invention of film originates from the “mummy complex” of human beings, which is driven by the desire to create and preserve moving images and realistic reproductions (BAZIN, 1967). In the early 20th century, due to underdeveloped technology, films were black and white and silent, whilst the early film theorists such as Rudolf Arnheim (1957) was inclined to medium purism. However, with the gradual development of sound, color, widescreen and other technologies, the notion of medium purism does not correspond to the reality, and the comprehensiveness of film art is further proved. The identity of film as a mass medium and its relationship with other media have been paid more attention, and filmmakers increasingly draw inspiration from other media, such as broadcast and television. With the arrival of the third industrial revolution, the computer science, information and digital technology and the Internet have reshaped the film format to a large extent, and the medium characteristic of cinema based on photographic film has been changed. As an ever-evolving medium, film has gradually moved beyond the limits of the screen. With the arrival of the fourth industrial revolution represented by artificial intelligence, virtual reality and so forth, cinemas are breaking through the traditional medium characteristics and entering the “Post-cinema Era”, showing the diversity and hybridity of transmedia and media convergence. The convergence of films with videos, games, Internet and virtual reality has resulted in new cinematic formats, exemplified by interactive film, VR film, database film and “desktop film”.

“Desktop film” breaks through the traditional film narrative aesthetics and conventions and redefines cinematic form and content. It has developed from big

screens toward the small screens, and adopts the ways of the transmedia and media convergence that incorporates a variety of media, such as a computer screen, the Internet search engine, hyperlinks, social media (such as Facebook), MSN Messenger (such as iMessage), instant video communications (such as Skype and Facetime), webcast, webcam, video/audio player, cellphone and so forth. These media not only function as carriers to narrative, but also become information themselves, and exert important influences on the plots and characters, reflecting Marshall McLuhan's (1989) assertion: "the medium is the message". For example, in *Searching*, the opening sequence is depicted from the Korean-American protagonist David's subjective perspective. On the computer screen, David is using the video player, Internet search engine, E-mail, calendar, etc., and the important events and memories of his family life are displayed: the desktop calendar shows that his wife Pamela died of cancer several years ago; the family DV shows his 16-year-old daughter Margot's growth experiences from primary school to high school; the wallpaper on the computer desk changes over time, and it highlights the details that will be crucial to the plot, exemplified by Margot's interest of playing the piano. After losing contact with Margot, David deciphers the password and logs in her Facebook, Instagram and other social media account, attempting to track down Margot through messages posted by Margot and her net friends on social media.

Paul Levinson (2004) argues that the anthropotropic evolution of media extends human's communication without disrupting the biological expectations. "Media evolve towards increasing consonance with pre-technological human communication modes, while maintaining their extension across time and space" (LEVINSON, 2001, p.185). Pre-technological modes of communication are mainly based on biological nature and are anthropotropic, such as speech, visual sense, auditory sense and so forth. The evolutions of film medium follow this anthropotropic feature from silent to sound, from black and white to color, from 3D to VR (virtual reality). The ability of cinemas to accurately reproduce reality is constantly improving, and film also increasingly extends human's biological nature. "Desktop film" reproduces the characteristics of human's media-oriented existence in digital era, and realizes the accurate representation of reality by media. In "desktop film", the focus is shifted from the characters to the media itself. Although it is difficult to display the body movements of the actors in the way of traditional *mise en scene*, "desktop film" adopts other ingenious ways to accurately express the affection and emotion of the characters. For instance, the emoticons in the online chat dialog as well as the details of the typing, deletion and sending of the texts can reflect the real emotions of the

characters and reproduce the psychological state of the characters. In *Searching*, when David knows that his daughter has not been to piano lessons for half a year, he types a strongly critical message into his daughter's Facebook dialog, but then deletes it and sends the text with tender tone to tell his daughter to reply to him. This detail reveals David's complex psychological process: after his wife's death, David is always cautious about his daughter Margot and does not blame Margot although she makes mistakes; meanwhile, David feels guilty for not receiving a phone call from his daughter before her disappearance. In traditional films, shots & reversal shots are often used to establish characters' communication line of sight. "Desktop films" do not need such a complex camera operation and editing strategy, but directly realize it through Skype, Facetime and other video communication tools to simulate the natural situation of face-to-face direct look and conversation, which tends to become more anthropotropic, reflecting the feature of media evolution.

Cyberspace and Technology in Desktop Films

Media ecology focuses on the relationship between media, technology and human being. McLuhan (1989) argues that all media are extensions of some human faculty (psychic or physical) and influence human by altering the environment. In Neil Postman's (1985, p.9) opinion, the forms of media can dominate the content and take command of a culture. In different eras, media and technology that are double-edged swords, exert influences on the transformations of people's life and culture. In the information age, "desktop film", that is based on computers, digital technology and Internet, creates a cyberspace, which accurately represents people's lives of digitization, virtualization and mediatization, thus reflecting the influences exerted by the media on the environment and revealing the advantages and disadvantages of media technology towards people and society.

Cyberspace is defined as the virtual reality space created by computer and Internet. In cyberspace, the spatio-temporal distance is no longer an obstacle, resulting in convenience of communication and achieving the "compression of time and space" (Harvey, 1989). People communicate instantly over long distances and human's visual sense and auditory sense have been greatly extended, and the abilities to obtain and transmit information have been enhanced as never before. "Desktop films" exemplified by *The Den* and the series of *Unfriended* portray that netizens from different parts of the world chatting together at the same time by video telephony

and webcam. The network “shrinks” the space, connects individuals who are difficult to meet in real life, realizes the “synchronization” of time, and establishes a virtual community and a “global village” (McLuhan’s terminology).

To some extent, cyberspace creates alienation between human beings, as well as a split within the individual. As McLuhan (1994, p.117) argues, “Our mechanical technologies for extending and separating the functions of our physical beings have brought us near to a state of disintegration by putting us out of touch with ourselves”. On the Internet, individuals use various symbols to construct the virtual images of themselves and their virtual environments, playing different roles in different situations. Interpersonal relationships are not what they appear to be, but become more complicated, and the senses of trust and security between human beings may be reduced due to the virtualization of cyberspace. For instance, in *Unfriended*, Laura who committed suicide once had some “good friends” when she was alive, but they were actually the ones who bullied and indirectly killed her in the past: they videotaped her getting drunk, posted the video on social media, insulted her and even encouraged her to kill herself. In *Searching*, David logs in Margot’s social media after her disappearance so as to contact her “friends”. However, most people respond that they are not Margot’s friends or not familiar with Margot and do not know her whereabouts. Social media seems to expand people’s social network and make more friends. In fact, it is difficult for people to gain true friendship on social media. What is worse, there are even people pretending or disguising to be someone in order to cheat others. For example, In *Searching*, in order to get close to Margot, Robert disguises as a girl whose mother is dying of cancer and has a similar life experience with Margot. They communicate on social media and then become net friends. Margot has a sense of compassion even donates her tuition for piano lessons to this net friend for “her sick mother” to cure illness. However, when Robert and Margot meet in real life, the truth is revealed, Robert even indirectly causes harm to Margot.

In cyberspace, the virtual and the real are mixed together, forming what Baudrillard (1995) terms “simulacra”. “Desktop films” showcase the “simulacra” created by cyberspace through replication and simulation, which makes people difficult to distinguish the real from the false or the imaginary, and sometimes the “simulacra” seems more real than reality. For instance, In *Unfriended: Dark Web*, in order to maliciously victimize Jeff, the criminal fabricates Jeff’s identity of a terrorist by intercepting Jeff’s online selfie videos and audio clips, re-edits them and adds the sound effects of the gun to make the “terrorist declaration”, and then calls 911 via online telephone. Jeff is actually innocent, while the policemen believe the “terrorist

declaration", break into Jeff's house and finally shoot him dead. In *Open Windows* and *The Den*, the fake live webcast looks no different from the real one.

From Postman (1996) perspective, technologies and their reforms are the double-edged swords combined the advantages with disadvantages: all technological change is a "Faustian bargain", because every advantage a new technology offers, there is a corresponding disadvantage; each new technology benefits some and harms others. McLuhan argues that human beings become the products or effects of media, rather than vice versa; although humans have some control over media, media actually call the shots; media "regulate information and determine events" and pamper human beings with the illusion that they are in charge (*apud* LEVINSON, 2001, p.183). Although media are the invention of people, they actually dominate human beings and reconstruct interpersonal relationship and living environment. While enjoying the convenience brought by the new media and technology, people are alienated and attacked by media and technology.

"Desktop films" show the consequences of people's over-reliance on media technology in current mediatized and virtualized survival in digital era. Media technology can indeed bring people a significant amount of convenience, and people can also use media and technology to satisfy their own interests. Moreover, the plot development of "desktop films" depends on the protagonist's operation and control over various media on the computer. For instance, in *Searching*, David uses social media to find clues to his missing daughter. However, in the media-oriented lives, human beings are dominated and controlled by the media, and interpersonal and social relations are reconstructed by the Internet and computer programs. People tend to communicate with strangers on social media rather than communicate with true friends and families around them in real life. Therefore, the characters who are concerned on the Internet, social media and cyberspace may be alienated or isolated individuals with weakened interpersonal relations and emotions in real life. For example, in *Searching*, Margot is a lonely high school girl who rarely communicates with her classmates and father, but she has expressed and displayed herself on a live webcast, gaining online attention and fake "friendship". After Margot's disappearance, David, his father, discovers that he does not know much about his daughter. What is more serious is that human beings succumb to and are manipulated by technology and media. "Desktop films" reveal a considerable number of problems caused by the dissimulation of media and technology to human beings, such as cyber manhunt, privacy leakage, network violence, illegal trade, hacker invasion, computer virus and so forth. When people attempt to voyeur, they also become the objects of

virtual voyeur and online surveillance, exposed to the public, as if they are located in a “panoramic prison” of Foucault style. For instance, in *Unfriended*, Blair, Mickey and their friends secretly shoot Laura’s drunkenness and upload the video on the Internet. Laura cannot endure network violence and commits suicide. In *Unfriended: Dark Web*, Matias steals a laptop in the cafe where he works, hacks into the owner’s social media and the hidden documents on the computer, and then discovers the evil crimes on the “dark web”. While hacking into the other’s computer, Matias is actually being spied and manipulated by the criminals. The owner of the computer is actually a criminal on the “dark web”, who pretends to lose the computer, secretly monitors Matias and his friends and tempts them into a trap with the aim of scapegoating and murdering them. This kind of murder becomes a live webcast for the outlaws who act as spectators and even pay rewards for this game on the “dark web”. The reason why criminals on the “dark web” are so rampant and unscrupulous is that technology and media make their subsistence more convenient. However, it is difficult for the police to track down them.

It is noticeable that technology itself is neutral and not responsible for all the negative effects. When people take advantage of technology, the defects of human nature such as greed, vanity and selfishness are magnified, resulting in self-infliction, which reflects the “Faustian bargain” between people and media technology. It is also attributed to the profound economic and socio-cultural reasons such as the impact of consumerism on people. For example, *Unfriended: Dark Web*, Matias falls into the abyss by stealing a high-powered laptop, which results from a sense of vainglory and greed driven by the consumerism culture.

Communication and Spectatorship of Desktop Films

Generally, the traditional films are produced with high budget, aiming to be projected in the cinemas or theaters. In the theater system, the content and communication mode of a film is basically determined by the filmmakers, while the audiences lack autonomy. Film is projected on the huge screen and the frame is obvious. Therefore, the difference between the imaginary world in the movie and the real space is obvious. During the film-watching process, audiences are fixed in the auditorium and restricted to the narrative time within the film. In this passive, dreamlike state of movie-watching experiences, audiences seem to enter the Plato’s cave and unconsciously accept the ideological interpellation of the cinematic apparatus (Jean

Louis Baudry, 1974). Traditional film editing methods, such as Hollywood continuous editing, create a "seamless" cohesive narrative mechanism, thus achieving the classic suture mechanism to realize the ideological interpellation towards spectators.

In contrast, the "desktop film" is featured with low budget, which is mainly projected on video websites and streaming media platforms exemplified by Netflix rather than in theaters. Due to the unique form and dramatic content, it attracts audiences especially young generations. The communication and spectatorship of "desktop films" are based on the decentralized and fragmented characteristics, and the audiences' experience of "desktop films" is completely different from that of watching movies in theaters. "Desktop films" are no longer limited to the cinema screen, but can be displayed on a variety of mobile terminals exemplified by computers and mobile phones. It changes the way of watching cinemas, realizes the diversification of film-watching approaches and places. The empowered audiences can have autonomy and choose the film-watching time and space based on their own needs, thus becoming the liberated and active subjectivities. Compared with watching films on the big screen in theaters, it is more suitable for audiences to watch the "desktop films" on a computer with a small screen. Spectators can choose to play fast when they use the video player to watch "desktop films" so as to gain the information more quickly and efficiently. They can also play back, slow, pause as well as zoom in, so as to watch more meticulously and focus on the detail that is easily to be ignored but crucial to the truth. For instance, in *Unfriended: Dark Web*, when the criminal fabricates Jeff's terrorist video and calls the 911, the dial of the telephone shows that the time is 8:14 PM, while the time of Matias's computer is 8:24 PM (that is on the top right corner of the screen). It is appropriate for viewers to pause the video player and zoom in the picture to notice this detail and the information that is conveyed: the criminal fabricates the video ten minutes before Matias and his friends know it. When Matias sees the video, the policemen have arrived at Jeff's home right now, therefore, Matias does not have time to remind or rescue Jeff.

"Desktop films" mainly adopt the protagonist's subjective perspective rather than the omniscient perspective. Generally, the audiences have the same perspective with the protagonist (i.e., the manipulator of the interface) and obtain the similar amount of information, as if the audiences were the insiders of the films, searching for clues and discovering the truth with empathy towards the characters. Additionally, "desktop films" mainly use the close shots and close-up shots, guiding the viewer's eyeline via the moving mouse, typing mark, window pop-up on the desktop screen, thus making the audience identify with the protagonist who is operating the interface

and creating a sense of participation, immersion and empathy. For instance, in *Searching*, the audience's perspective is the same with David's, therefore, the audience seems to be involved in David's search for his missing daughter and experiences the feelings of anxiety and sorrow.

Different from the ritualization and publicization of traditional viewing experiences in cinemas, watching "desktop films" tends to be more secular, routine-oriented and private. Moreover, in "desktop film", the filmic frame resembles the audiences' computer interface and seems to "integrate" into individual lives of the audiences. "Desktop film" creates a "mixed reality" (Zhang, 2019, p.36), therefore, it is easier for the audience to confuse the cinema world with the real space, thus having a sense of immersion and engagement and creating a sense of realism. For instance, in *The Den* and the series of *Unfriended*, when the characters are surveillant by the hackers, the audiences seem to be being monitored. The sound effects of the apps in the film may make the audiences think they are running their own programs. A chat window pops up in the filmic cyberspace, while the audiences perhaps mistakenly think it's a message from their own friend in reality.

As Zhang (2019, p.35) indicates, "Desktop film" adopts a "gamification narrative structure": "clear and specific tasks and objectives, timely and valuable information feedback, integration of action and consciousness, sense of participation and control"; and the actions of characters follow the gamification mode: "information discovery » action (get new feedback) » action". The plots of "desktop film" are similar to the ideas of these game with tasks and levels designed. In order to achieve the goal, the characters follow the rules and continuously overcome difficulties. For instances, in *Searching*, there is a father searching for his missing daughter; in *Profile*, the female reporter sneaks into the online terrorist organization for investigation; in *Unfriended: Dark Web*, criminals practice the games of scapegoating and murdering. When watching these gamification films, spectators identify with the protagonists and seem to play games.

"Desktop films" require a high degree of capabilities from the spectators, and those familiar with digital media and technology, cyberspace, network language can truly understand and appreciate such films. Additionally, it can be argued that such new forms of films as "desktop films" are also changing spectators' recognition and aesthetic perception towards cinemas. In the 20th century, the emergence of film cultivates the spectators' montage thinking, so that people gradually develop the aesthetic ability to appreciate the art of film. In the digital media age, as Friedberg (2006) argues, "graphical user interface" of computer featured with "multiple-

screen windows" changes the single-point fixed perspective principle that has long dominated the western visual mechanism. Desktop films resemble the computer window interfaces characterized by hyperlink, decentralization and fragmentation, which reflects and will further cultivate spectators' screen life and Internet thinking in the real world.

Conclusion

Media ecology emphasizes the influences of media form and technology on human beings and their living environment. As one of the most important mass media, film follows the rules of the evolution of media and evolves through the interaction and co-existence and integration with other media. Nowadays, as one of the new cinematic forms, "desktop film" is the product of media evolution, highlighting the characteristics of transmedia and media convergence. "Desktop film" also follows the anthropotropic trend of media evolution, improving the level of representing the real world. Based on computers, digital technologies and the Internet, "desktop films" create cyberspace, accurately reproduce people's living situation of digitization, virtualization and mediatization, and reveal the advantages and disadvantages of media technology on people and society, which is considered as a double-edged sword. Although the media and technology are neutral, the defects of human nature are magnified and result in self-infliction. "Desktop films" also influence the way films are distributed and communicated, and reshape the audiences' viewing behavior and recognition. Different from the traditional cinema-watching experience in theaters, it is more appropriate for spectators to watch "desktop films" on computers. Therefore, audiences become the liberated and active subjects and have more autonomy. "Desktop films" mainly adopt protagonists' subjective perspective, and are characterized by dailiness, privatization and realism with whose frames resemble audiences' own computers, thus making the audience feel immersed and identify with characters. Audiences also have a gamification experience when watching "desktop films". Moreover, "desktop films" reflect spectator's screen life and Internet thinking, and will further change people's recognition towards cinemas.

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